



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460**

**OFFICE OF PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES**

Bryan Arroyo  
Acting Assistant Director for Endangered Species  
U.S. Fish and Wildlife Service  
1849 C Street, NW  
Washington, D.C. 20204

Dear Mr. Arroyo:

The Office of Pesticide Programs (OPP), U.S. Environmental Protection Agency (EPA) respectfully requests the initiation of Endangered Species Act (ESA) section 7(a)(2) formal consultation under 50 CFR Part 402.46, Optional Formal Consultation Procedures for FIFRA Actions. This consultation request addresses the potential effects of pesticides registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) containing the active ingredient metam sodium, to the California red-legged frog (CRLF) (*Rana aurora draytonii*). Our assessment resulted in a determination that the use of pesticides containing metam sodium is likely to adversely affect the CRLF. This determination is based on metam sodium's potential to both directly and indirectly affect the species in core and critical habitat areas. Metam sodium applied with sprinkler irrigation application for some, but not all, uses was determined to directly and indirectly affect the aquatic phases of the CRLF from acute exposure. The potential indirect effects to the aquatic phase of the species for some, but not all, uses when applied with sprinkler irrigation was a reduction in prey base and vegetative components of aquatic habitats. Metam sodium applied with sprinkler irrigation or shank injection was determined to indirectly affect the terrestrial phase of the species. The potential indirect effects to the terrestrial phase of the species were reduction in invertebrate prey base and vegetative components of terrestrial habitats. Further, based on potential alteration of one or more primary constituent elements, EPA has also determined that use of metam sodium may result in effects to critical habitat.

This assessment was conducted consistent with the scientific procedures outlined in the Agency's Overview Document<sup>1</sup> and reviewed by the U.S. Fish and Wildlife

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<sup>1</sup> U.S. EPA. 2004. Overview of the Ecological Risk Assessment Process in the Office of Pesticide Programs. Office of Prevention, Pesticides, and Toxic Substances. Office of Pesticide Programs. Washington, D.C. January 23, 2004.

Service (FWS) and National Marine Fisheries Service<sup>2</sup>. The effects determination was made by staff in the Environmental Fate and Effects Division (EFED) who have been trained by FWS and certified to make effects determinations. Further, the attached assessment and effects determination has undergone review by our internal Peer Review Panel, which included one or more reviewers also trained by FWS and certified to make effects determinations. As you are aware, after having carefully reviewed the Overview Document, FWS concluded that EPA's ecological risk assessment process "will produce effects determinations that reliably assess the effects of pesticides on endangered and threatened species [] and critical habitat pursuant to Section 7 of the [ESA] and [its] implementing regulations", and that "this approach also will produce all information necessary to initiate formal consultation where appropriate."

The scope of this assessment is consistent with a stipulated injunction which resolved litigation brought by the Center for Biological Diversity against EPA under the Endangered Species Act. As a result, this assessment focuses only on the California red-legged frog. EPA acknowledges that use of pesticides containing metam sodium is not limited to the geographic scope of this assessment and that in the future, potential risks to other listed species will need to be evaluated by EPA.

While our determination is that pesticides containing metam sodium are likely to adversely affect certain phases of the CRLF within core and critical habitat areas, this determination does not apply throughout these geographic areas. EPA believes the precise geographic scope of potential effects is dependent upon both the specific locations and sizes of CRLF populations (for direct effects and indirect effects resulting from effects to prey base), in relation to actual use of metam sodium. Geographic scope of potential effects also is dependent upon specific locations and attributes (e.g., populations of prey species) of the various habitat types within the core and critical habitat areas (for indirect effects resulting from habitat effects), in relation to actual use of metam sodium. This location information regarding the species and its various types of habitat are not available to EPA. We look forward to the U.S. Fish and Wildlife Service bringing this species-specific information to the consultation process to appropriately characterize the spatial and temporal extent of any potential effects to the species or its habitat.

As agreed to in the past, the subject assessment and effects determination and appendices may be accessed by your staff from our Web site at <http://www.epa.gov/oppfead1/endanger/effects> within the next several days. Please let me know if you have any questions regarding this request or the materials we have developed to initiate formal consultation.

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<sup>2</sup> USFWS/NMFS. 2004. Letter from USFWS/NMFS to U.S. EPA Office of Prevention, Pesticides, and Toxic Substances. January 26, 2004. (<http://www.fws.gov/endangered/consultations/pesticides/evaluation.pdf>)

Enclosures

Sincerely,

*/original signed by A. Williams on July 20, 2007/*

Arthur-Jean B. Williams, Associate Director  
Environmental Fate and Effects Division (7507P)

Cc: Debbie Edwards  
Peter Caulkins